

Name: _____

pa1030: Box multiplication of linear binomials (v11)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(3x + 9)$ and $(2x + 7)$.

*	3x	9	
2x	$6x^2$	18x	
7	21x	63	

ANSWER: $6x^2 + 39x + 63$

Question 2

Use the box method to multiply $(-6x + 5)$ and $(7x + 8)$.

*	$-6x$	5
7x	$-42x^2$	$35x$
8	$-48x$	40

ANSWER: $-42x^2 - 13x + 40$

Question 3

Use the box method to multiply $(-3x - 2)$ and $(7x + 4)$.

*	$-3x$	-2
7x	$-21x^2$	$-14x$
4	$-12x$	-8

ANSWER: $-21x^2 - 26x - 8$